Friday Flyer - June 22, 2012

Something to share—an interesting research project or kudos for a student, teacher or mentor? Contact Kris Whelan.

CENTER SPOTLIGHT: Idaho State University - http://www.physics.isu.edu/QuarkNet/

Contact Steve Shropshire to learn about about more advanced cosmic ray experiments.

Idaho State University joined QuarkNet in 2004. Over the years, the workshops averaged about 10 teachers. Recently, teachers have been focused on cosmic ray investigations. In 2010, teachers took detectors and a portable power supply to collect data at different elevations on a nearby mountain. This year, the teachers are working on a flux study with varying amounts of natural shielding. They have taken two detectors and power supplies to the Minnetonka Cave to collect data from above and inside the cave at different depths. They are analyzing data today, June 22! Idaho State holds a unique place among western universities. Its physics program has close ties with both Idaho National Laboratory and the Idaho Accelerator Center, providing an opportunity to do cutting-edge research in related areas. Researchers explore practical applications of high-energy physics while providing support to research in related fields including radiation biology, positron imaging, and one of the nation's leading programs in health physics.

News from QuarkNet Central
Does all this exposure to particle physics really affect your students?
Nathaniel Amos, has something to say about that. He was a QuarkNet student journalist who reported during CERN Open Days several years ago. He observed "..on a personal note, It's truly remarkable to know graduate students here at CERN who've done extraordinary things and worked many more long hours than I've yet to experience, but who have never seen CMS up close in person. Thanks to QuarkNet, I was fortunate enough to do just that as a high school student. Therefore, I will always be grateful for the efforts of QuarkNet in allowing me the opportunity of a lifetime. To say it propelled my career and fueled my interest would be an understatement."

Nathaniel just received a B.S. in physics from the University of Florida. He worked with Darin Acosta for four years on UF's Cathode Strip Chamber Track Finder, part of the Level 1 trigger of the CMS muon system. He also participated in a CMS analysis searching for the anomalous production of highly boosted Z's decaying to two muons. He will begin graduate school at Ohio State this fall in particle physics.

Physics Experiment Roundup
CERN to start producing medical isotopes
http://cdsweb.cern.ch/journal/CERNBulletin/2012/14/News Articles/1434420?ln=en
"A promising project that was hailed at the ICTR-PHE 2012 medical conference (see Bulletin issues 10-11/2012 and 12-13/2012) has seen the light of day at CERN. The project, known by the name of MEDICIS, will make it possible to produce a large variety of radioactive isotopes for medical research." From the CERN Bulletin.

QuarkNet Staff Teachers
Ken Cecire, kcecire@nd.edu
Bob Peterson, rspete@fnal.gov
Tom Jordan, jordant@fnal.gov
Kris Whelan, kkwhelan@uw.edu